

CURRICULUM VITAE



Dr. Mukesh Kumar Meghvansi, MSc, PhD, MBA
Scientist 'D', DRDS
Defence Research & Development Establishment,
Defence R & D Organisation
(Ministry of Defence, Govt. of India),
GWALIOR-472002 (Madhya Pradesh), INDIA

RESEARCH/TRAINING EXPERIENCE

(Total 10 years)

- **Details of involvement in research project as JUNIOR RESEARCH FELLOW**
NAME OF RESEARCH PROJECT: INCO-DEV Research Project (Contract No. ICA4-CT-2001-10057)
SPONSORING AGENCY: European Commission, Brussels
PROJECT TITLE: Soybean BNF and mycorrhization for improved production in South Asia
BRIEF OVERVIEW of research work done as JRF in the Project (contribution as team member): In this project, we recovered around 60 rhizobial strains and more than 20 different arbuscular mycorrhizal fungi from various soybean cultivating regions of India. Phenotypic characterization of these two important microorganisms was carried out so as to study their diversity. Symbiotic effectiveness of these microorganisms was evaluated by conducting pot experiments and multilocational field trials. We got success in recovering some rhizobial strains efficient enough to significantly improve the productivity of soybean. These strains are deposited at National Bureau of Agriculturally Important Microorganisms (ICAR), Kausumor (UP).
- Obtained Ph. D. on "*Isolation, Identification and Effectiveness of Rhizobial strains and Arbuscular Mycorrhizal (AM) fungi of soybean cultivars grown in Bundi and Udaipur, Rajasthan*" under supervision of Professor Dr. S. K. Mahna at Dept. of Botany, Maharshi Dayanand Saraswati University, Ajmer (Rajasthan).
- Undergone DRDO- orientation course of at Institute of Technology Management, Mussoorie (UK) during 02-20 Feb 2009.
- Attended a course on "*Biostatistics for Life Sciences*" under continuing Education Programme (CEP) of DRDO held at Defence Research Laboratory, Tezpur (Assam) during 09-13 November, 2009.
- Attended a course on "Communication, presentation and report writing skills" at XLRI, Jamshedpur 30 Sep-4 Oct 2013.
- Recognized as Ph. D. Co-guide, Amity University Uttar Pradesh, India.

Research Mentored

- Supervised/supervising following Masters dissertations:

S. No.	Name of student	Thesis title	Degree	Year of submission
1.	Mr. Mansoor Ahmad Rather,	Status of arbuscular mycorrhizal fungal (AMF) occurrence, distribution and spore diversity in	M. Sc. (Botany)	2005-06

	Bundelkhand University, Jhansi (UP)	relation with physico-chemical edaphic factors of certain wheat growing fields of Jhansi		
2.	Mr. Devendra Kumar Maurya, Bundelkhand University, Jhansi (UP)	Studies on arbuscular mycorrhizal (AM) fungal wasteland ecosystem of Pichhore, Jhansi	M. Sc. (Botany)	2005-06
3.	Mr. Mohd. Younis Bhat, Bundelkhand University, Jhansi (UP)	Preliminary assessment of antimicrobial activity of plant extracts on phytopathogenic <i>Xanthomonas campestris</i> and <i>Aspergillus niger</i>	M. Sc. (Botany)	2006-07
4.	Mr. Muzafar Ahmad, Bundelkhand University, Jhansi (UP)	Study of botanicals for their antimicrobial potential against certain phytopathogenic microorganisms	M. Sc. (Botany)	2007-08
5.	Mr. Vipin Panwar (Roll no. MPB\07\715), Bundelkhand University, Jhansi (UP)	Temporal variation in arbuscular mycorrhizal fungi and physico-chemical edaphic factors of wheat fields of Jhansi	M. Phil. (Botany)	2007-08
6.	Mr. Ravi Shekhar (R No 20110923) Mangalayatan University, Aligarh, UP	Development of PCR-DGGE based molecular markers to distinguish <i>Cercospora</i> species	M.Tech. (Biotech)	2013
7.	Ms. Priyanka Chaudhary (R No 20110679) Mangalayatan University, Aligarh, UP	Comparative evaluation of conventional and Real-Time PCR techniques for detection of <i>Cercospora</i> sp. using <i>CTB</i> and <i>CRG</i> genes based molecular markers	M.Tech. (Biotech)	2013

- Presently working as Scientist 'D' (Group-A Technical/Gazetted; payscale Rs 15600-39100; grade pay Rs 7600) at Defence Research & Development Establishment, Defence R & D organisation, Gwalior (Madhya Pradesh).

TEACHING EXPERIENCE

- Assisted in M. Sc. (Botany) teaching programme at Deptt. of Botany, Maharshi Dayanand Saraswati University, Ajmer (Rajasthan) for three academic sessions (2002-03, 2003-04 and 2004-05).
- Served as Lecturer (SFS), Department of Botany, Bundelkhand University, Jhansi (U. P.) for the period of 18 March 2005 to 16 July 2008 in the pay scale of Rs. 8000-13500.

RESEARCH PROJECTS HANDLED/RUNNING

1. **Project title:** Effective Decomposition of Organic Waste with emphasis on kitchen waste using Microbial Consortium and Vermicomposting. **Sponsoring agency:**

- DRDO (DRL-RD-P-2009/Task-30) **Duration:** Mar 2009 to Jan 2010. In collaboration with Dr. Rajni Singh, Amity University Uttar Pradesh. **Project cost.** `5.00 Lakh.
2. **Project title:** Exploring the role of *Piriformospora indica* as bio-weedicide and value addition to Naga Chilli of North East India. Sponsoring agency: DRDO (DRL-RD-P-2009/Task-31). **Duration:** Mar 2009 to Feb 2011. In collaboration with Professor Dr. Ajit Varma, Amity University Uttar Pradesh. **Project cost.** `6.49 Lakh.
 3. **Project title:** Characterization of technofunctional and biofunctional properties of Napin protein hydrolysates of rapeseed meal. **Sponsoring agency:** DRDO (project No. DRLT-P1-2013/Task-62) **Duration:** 2 years (w.e.f. 26 Nov 2013) In collaboration with Prof. Charu Lata Mahanta Tezpur University, Tezpur. **Project cost.** `5.00 Lakh.

PARTICIPATION IN CONFERENCE/ WORKSHOP/ SYMPOSIA

1. 25th All India Botanical Conference of Indian Botanical Society and National Symposium on Biosciences: Advances, Impact & relevance held at MJP Rohilkhand University, Bareilly, (U. P.) during 27-29 Oct. 2002.
2. Patent Awareness Workshop held at Maharshi Dayanand Saraswati University, Ajmer (Rajasthan) on 27th March, 2003.
3. International Symposium on Microbial diversity: Opportunities, Challenges & Relevance in New millennium, held at Rani Durgavati University Jabalpur (Madhya Pradesh) during 19th – 21st Nov. 2004.
4. National conference on Management of Land Resources & Land-use towards sustainable development, held at Institute of Environment & Development studies, Bundelkhand University, Jhansi (UP) during 18th – 19th Oct. 2005.
5. Knowledge exchange programme in Life Science education and research (Kepler-2006) held at J. C. Bose Institute of Life Science, Bundelkhand University, Jhansi during 28th – 29th Jan. 2006.
6. Quiz on immunology 'IMMUNO QUEST 2007' held at Institute of Biomedical Sciences, Bundelkhand University, Jhansi on 9 May, 2007.
7. Symposium on 'Recent trends in diagnosis and prevention of AIDS' held at Bundelkhand University, Jhansi on 01 December, 2007.
8. Workshop on 'Nanotechnology ka uday: Vaigyanik awam takniki drastikon' (sponsored by Commission for Scientific and Technical Terminology, Ministry of HRD, Govt. of India) held at Bundelkhand University, Jhansi during 14-15 March, 2008.
9. Workshop on 'Renewable Energy Resources Assessment: Present Status and Future Strategy' held at Department of Energy, Tezpur University, Tezpur (Assam) on 16 October, 2008.
10. Regional Seminar on 'Intellectual property and Innovation management in knowledge era' organized by National Research Development Corporation, Govt. of India, New Delhi and supported by DRDO at Hotel Luit, Tezpur (Assam) during 23-24 October, 2008.

11. Represented DRL, Tezpur at BHARAT NIRMAN: Joint Media Campaign of Ministry of Information & Broadcasting, Govt. of India and 5 Mountain Division, Tenga held at Seppa, East Kameng District (Arunachal Pradesh) during 19-21 November, 2008.
12. National Conference on Electron Microscopy & Allied Fields held at Bundelkhand University, Jhansi during 17-19 January, 2009.
13. National seminar on “Exploitation, Utilization and Strategy Action Plan for Sustainable Management of Plant Resources” to be held at Department of Botany, Gauhati University, Guwahati during 27-28 February, 2009.
14. 346th Intensive Hindi Workshop (Gahan Hindi Karyashaala) at Central Hindi Training Institute (Department of Rajbhasha, Min of Home affairs, Govt of India), New Delhi during 03-07 May 2010.
15. International conference on “Microorganisms in Environmental Management and Biotechnology” held during 01-03 Jul, 2011 at Department of Biotechnology & Bioinformatics Centre, Barkatullah University, Bhopal, Madhya Pradesh, INDIA
16. International congress on “Microbes for human health and environment” held during 29 Sep-01 Oct 2014 at Amity Institute of Microbial Technology, Amity University, Noida, Delhi NCR, INDIA.
17. National conference on “Recent advances in biodegradation of human wastes” held at Defence Research Laboratory, DRDO, Tezpur (Assam) during 16-17 Dec 2014.

MEMBERSHIP OF SCIENTIFIC BODIES/ SOCIETIES

1. **Life member** of Scientist Unique Researcher’s Yare Association, Jhansi (U. P.).
2. **Life Member** of Indian Botanical Society.
3. **Life member of Assam Science Society.**
4. **Annual member of International Society for Plant Pathology, USA**
5. **Senior member (upto Apr 2017) of the Institute of Research Engineers and Doctors, USA**

MEMBER OF EDITORIAL/REVIEW BOARD FOR INTERNATIONAL JOURNALS

1. Asian Journal of Agricultural Research; ISSN: 1819-1894; SCIENCE ALERT, New York, USA; <http://www.scialert.net/eboard.php?issn=1819-1894>
2. Asian Journal of Biotechnology (ISSN: 1996-0700; <http://scialert.net/eboard.php?issn=1996-0700>)
3. International Journal of Botany; ISSN: 1811-9700; SCIENCE ALERT, New York, USA; <http://www.scialert.net/eboard.php?issn=1811-9700>
4. International Journal of Plant Pathology; ISSN: 1996-0719; SCIENCE ALERT, New York, USA; <http://www.scialert.net/eboard.php?issn=1996-0719>
5. Journal of Ecobiotechnology (ISSN: 2077-0464; <http://journal-ecobiotechnology.com/about/editorialTeam>)

6. Journal of Environmental Chemistry and Ecotoxicology; ISSN: 2141-226X (<http://www.academicjournals.org/JECE/Email.htm>)
7. Microbiology Journal; ISSN: 2153-0696; SCIENCE ALERT, New York, USA; <http://www.scialert.net/eboard.php?issn=2153-0696>
8. Pharmacognosy Journal (ISSN: 0975-3575; <http://www.phcogj.com/content/editorial-board>)
9. Journal of Phytology (www.journal-phytology.com, ISSN: 2075-6240): Nominated as Guest editor for a special issue (Unraveling Beneficial Plant–Microbe Interactions: Current Scenario and Future Prospects); <http://journal-phytology.com/issue/view/132>
10. South Asian Journal of Experimental Biology (<http://sajeb.org/pages/view/editorial>; ISSN:2230-9799)

PATENTS APPLIED

1. **Meghvansi MK**, Khan MH, Gupta R, Veer V (2014) Oligonucleotide primer sequences for cercosporin toxin biosynthesis (CTB) genes and method of detection of *Cercospora* species. Patent applied to Indian Patent Office vide **Application number: 2991/DEL/2014**
2. **Meghvansi MK**, Gupta R, Veer V (2015) Cercosporin toxin biosynthesis-suppressive organic formulation for the management of cercospora leaf spot disease and a method thereof. Submitted to Dte of ER and IPR, DRDO Hqrs, New Delhi vide letter No. DRL/1009/01/TC dated 10 Dec 2015 for onward filing to Indian Patent Office.

APPLIED for DESIGN REGISTRATION

1. **Meghvansi MK**, Gupta R, Veer V (2015) Vermireactor system for converting organic waste biomass into fertilizer using earthworms. Submitted to Dte of ER and IPR, DRDO Hqrs, New Delhi vide letter No. DRL/1009/TC dated 20 Jan 2016 for onward filing to Indian Patent Office.

TRADEMARK APPLIED

1. An application for trademark registration on '**WORMI POWER**' (a liquid organic fertilizer/plant growth promoter) has been submitted to the office of the Registrar of Trade Marks, Govt of India. Application number: **2826675** dated **14 Oct 2014**

PUBLICATIONS

Journal articles

1. **Meghvansi MK**, Prasad K, Mahna SK. 2005. Identification of pH tolerant *Bradyrhizobium japonicum* strains and their symbiotic effectiveness in soybean (*Glycine max* (L.) Merr.) in low nutrient soil. African Journal of Biotechnology 4 (7): 663-666. **(Journal included in SCI expanded list-2007)**

2. Prasad K, **Meghvansi MK**. 2005. Interaction between indigenous *Glomus fasciculatum* and *Rhizobium* and their stimulatory effect on growth, nutrient status and nodulation of *Acacia nilotica* (L.) Del. Flora and Fauna 11(1): 51-56.
3. Prasad K, **Meghvansi MK**, Harwani D, Mahna SK, Werner D. 2005. Synergistic effects of Arbuscular Mycorrhizal fungi in soybean (*Glycine max* L. Merrill). Anusandhan 1 (1): 13-19.
4. Prasad K, **Meghvansi MK**, Harwani D, Mahna SK, Werner D. 2006. Distribution of arbuscular mycorrhizal fungi in Soybean (*Glycine max* (L.) Merrill) rhizosphere. Mycorrhiza News 17 (4): 14-17.
5. Harwani D, **Meghvansi MK**, Prasad K, Mahna SK, Werner D. 2006. Stimulatory effect of modified 20E media on the redifferentiation potential of soybean root nodule bacteroids. Current Science 90 (11): 1474-1475. [**Impact Factor (2007): 0.800; NAAS rating (2007): 7.8**]
6. Siddiqui S, **Meghvansi MK**, Zia-ul Hasan. 2007. Cytogenetic changes induced by Sodium Azide (NaN₃) on *Trigonella foenum-graecum* seeds. South African Journal of Botany 73(4): 632-635. (**Elsevier, AMSTERDAM**), **Impact Factor (2008): 1.113; NAAS rating(2007): 7.7**
7. Siddiqui S, **Meghvansi MK**, Jabee F. 2007. Effect of UV-B radiation on vegetative growth and seed weight of soybean (*Glycine max* L Merrill). Progressive Agriculture 7(1/2): 42-45. [**NAAS rating 2.0**]
8. **Meghvansi MK**, Mahna SK. 2007. Study on migration of *Bradyrhizobium* from soybean fields. Flora and Fauna 13 (1): 11-14.
9. Siddiqui S, Khan SS, **Meghvansi MK**, Aali NS. 2008. Effect of herbicide (maleic hydrazide) on seed germination and radicle length of *Trigonella foenum-graecum*. Indian Journal of Applied and Pure Biology 23 (1): 103-106.
10. **Meghvansi MK**, Prasad K, Harwani D, Mahna SK. 2008. Response of soybean cultivars toward inoculation with three arbuscular mycorrhizal fungi and *Bradyrhizobium japonicum* in the alluvial soil. European Journal of Soil Biology 44: 316-323. [**Elsevier, AMSTERDAM**], **Impact Factor (2009): 1.247; NAAS rating (2007): 7.9**
11. Siddiqui S, **Meghvansi MK**, Wani MA, Jabee F. 2009. Evaluating cadmium toxicity in the root meristem of *Pisum sativum* L. Acta Physiologiae Plantarum 31(3): 531-536. [Springer; DOI: 10.1007/s11738-008-0262-3], **Impact Factor 1.232 (2008); NAAS rating (2007):7.6. Index Copernicus Value (ICV): 12.34**
12. Siddiqui S, Khan SS, **Meghvansi MK**, Bhardwaj S. 2009. Allelopathic affect of aqueous extract of *Acacia nilotica* on seed germination and redicle length of *Triticum aestivum* var. Lok-1. Indian Journal of Applied and Pure Biology 24 (1): 217-220.
13. Ali SF, Rawat LS, **Meghvansi MK**, Mahna SK. 2009. Selection of stress-tolerant rhizobial isolates of wild legumes growing in dry regions of Rajasthan, India. ARPN Journal of Agricultural and Biological Science 4 (1): 13-18. [ISSN 1990-6145; Full paper available at http://www.arpnjournals.com/jabs/research_papers/rp_2009/jabs_0109_105.pdf].
14. **Meghvansi MK**, Mahna SK. 2009. Evaluating the symbiotic potential of *Glomus intraradices* and *Bradyrhizobium japonicum* in vertisol with two soybean cultivars. American-Eurasian Journal of Agronomy 2 (1): 21-25. [ISSN 1995-896X; Full paper available at [http://www.idosi.org/aeja/2\(1\)09/5.pdf](http://www.idosi.org/aeja/2(1)09/5.pdf)].

15. Siddiqui S, Yadav R, Yadav K, Wani FA, **Meghvansi MK**, Sharma S, Jabeen F. 2009. Allelopathic potentialities of different concentration of aqueous leaf extracts of some arable trees on germination and radicle growth of *Cicer arietinum* Var. – C-235. *Global Journal of Molecular Sciences* 4 (2): 91-95. [ISSN 1990-9241; (Full paper available at [http://www.idosi.org/gjms/gjms4\(2\)/8.pdf](http://www.idosi.org/gjms/gjms4(2)/8.pdf)].
16. Siddiqui S, **Meghvansi MK**, Yadav K, Yadav R, Wani FA, Ahmad A. 2009. Efficacy of aqueous extracts of five arable trees on the seed germination of *Pisum sativum* L. Var-VRP-6 and KPM-522. *Botany Research International* 2 (1): 30-35. [ISSN 1995-8951; (Full paper available at [http://www.idosi.org/bri/2\(1\)09/6.pdf](http://www.idosi.org/bri/2(1)09/6.pdf)].
17. Siddiqui S, Yadav R, Wani FA, Yadav K, **Meghvansi MK**, Sharma S, Jabeen F. 2009. Phytotoxic effects of some agro-forestry trees on germination and radicle growth of *Cicer arietinum* Var.-Pusa-256. *Global Journal of Environmental Research* 3 (2): 87-91. [ISSN: 1990-925X; (Full paper available at [http://www.idosi.org/gjer/gjer3\(2\)09/4.pdf](http://www.idosi.org/gjer/gjer3(2)09/4.pdf)].
18. Siddiqui S, Bhardwaj S, Khan SS, **Meghvansi MK**. 2009. Allelopathic effect of different concentration of water extract of *Prosopis juliflora* leaf on seed germination and radicle length of wheat (*Triticum aestivum* Var-Lok-1). *American-Eurasian Journal of Scientific Research* 4 (2): 81-84. [Full paper available at [http://www.idosi.org/aejsr/4\(2\)09/6.pdf](http://www.idosi.org/aejsr/4(2)09/6.pdf)].
19. Kumar V, Gogoi BJ, **Meghvansi M K**, Singh L, Srivastava RB, Deca DC. 2009. Determining the antioxidant activity of certain medicinal plants of sonitpur (Assam), India using DPPH assay. *Journal of Phytology* 1 (1): 49-56. [Full paper available at <http://journal-phytology.com/article/view/682/573>].
20. **Meghvansi MK**, Prasad K. 2009. Legume Rhizobia Technology: Aspects and prospects. *Amrawati University Research Journal* 4(1): 1-13.
21. Siddiqui S, Alamari S, **Meghvansi MK**, Khan SS, Rather AA, Verma A. 2010. Evaluating the toxic effects of *Ficus infectoria* Roxb. and *Emblca officinalis* Gaertn. leaf extracts on cell division and chromosomal morphology of *Cicer arietinum* L. *Journal of Ecobiotechnology* 2/1: 49-52. [Full paper available at <http://journal-ecobiotechnology.com/article/view/1656/1027>].
22. **Meghvansi MK**, Prasad K, Mahna SK. 2010. Symbiotic potential, competitiveness and compatibility of indigenous *Bradyrhizobium japonicum* isolates to three soybean genotypes of two distinct agro-climatic regions of Rajasthan, India. *Saudi Journal of Biological Sciences* 17: 303-310 (**Elsevier, AMSTERDAM**), DOI: 10.1016/j.sjbs.2010.06.002.
23. **Meghvansi MK**, Siddiqui S, Gupta VK, Vairale M, Gogoi HK, Singh L. 2010. Naga chilli: A potential source of capsaicinoids with broad-spectrum ethnopharmacological applications. *Journal of Ethnopharmacology* 132 (1): 1-14 (**Elsevier, AMSTERDAM**) DOI: 10.1016/j.jep.2010.08.034; **Impact Factor (2010): 2.466; 5-year Impact factor: 3.216; NAAS rating(2007): 8.4**
24. Ali SF, Rawat LS, **Meghvansi MK**, Mahna SK. 2010. Screening of rhizobial isolates of *Leucaena leucocephala* Lam. for their mimosine degradation ability. *Journal of Phytology* 2 (7): 01-06.
25. Ali SF, Rawat LS, **Meghvansi MK**, Mahna SK. 2010. Determination of the host range of tree and herb rhizobia for their alternative legumes. *Journal of Phytology* 2 (7): 101-106.

26. Khan MH, **Meghvansi MK**, Panwar V, Gogoi HK, Singh L. 2010. Arbuscular mycorrhizal fungi-induced signalling in plant defence against phytopathogens. *Journal of Phytology* 2 (7): 53-69.
27. Panwar V, **Meghvansi MK**, Siddiqui S. 2011. Short-term temporal variation in sporulation dynamics of arbuscular mycorrhizal (AM) fungi and physico-chemical edaphic properties of wheat rhizosphere. *Saudi Journal of Biological Sciences* 18: 247-254 (**Elsevier, AMSTERDAM**). **Included in Top25 hottest articles of ScienceDirect.**
28. Prasad K, **Meghvansi MK**, Khan AA. 2011. Incidence of arbuscular mycorrhizal fungi (AMF) in tree species in arid zones of Ajmer region of Rajasthan. *Mycorrhiza News* 22 (4): 12-15.
29. Sarkar P, **Meghvansi M**, Singh R. 2011. Microbial Consortium: A New Approach in Effective Degradation of Organic Kitchen Wastes. *International Journal of Environmental Science and Development* 2 (3):170-174. **Journal ISSN: 2010-0264.**
30. Siddiqui S, **Meghvansi MK**, Khan SS. 2012. Glyphosate, alachor and maleic hydrazide have genotoxic effect on *Trigonella foenum-graecum* L. *Bulletin of Environmental Contamination and Toxicology* 88 (5): 659-665. **Impact Factor (2011): 1.018; NAAS rating(2012): 7.5**
31. Meghvansi MK, Md. Haneef Khan, Gupta R, Gogoi HK and Singh L. 2012. Vegetative and yield attributes of okra and naga chilli as affected by foliar sprays of vermiwash on acidic soil. *Journal of Crop Improvement* 26 (4): 520-531. **Taylor & Francis. Index Copernicus Value (ICV): 5.74**
32. Sheikh M, Malik A, Meghavansi MK, Mahmood I. 2012. Studies on some plant extracts for their antimicrobial potential against certain pathogenic microorganisms. *American Journal of Plant Sciences* 3(2): 209-213.
33. **Meghvansi MK**, Khan Md H, Gupta R, Veer V. 2013. Identification of new species of *Cercospora* causing leaf spot disease in *Capsicum assamicum* in northeastern India. *Research in Microbiology* 164: 894-902. Elsevier; **Impact Factor (2013): 2.889; 5-year Impact factor: 2.943; NAAS rating(2012): 7.7**
34. Khan Md H, Meghvansi MK, Gupta R, Veer V, Singh L, Kalita MC. 2014. Foliar spray with vermiwash modifies the arbuscular mycorrhizal dependency and nutrient stoichiometry of bhut jolokia (*Capsicum assamicum*). *PLoS One* 9 (30): e92318. DOI: 10.1371/journal.pone.0092318. **Impact Factor (2013): 3.730; 5-year Impact factor: 4.24.**
35. Khan Md H, Meghvansi MK, Gupta R, Veer V. 2015. Elemental stoichiometry indicates predominant influence of potassium and phosphorus limitation on arbuscular mycorrhizal symbiosis in acidic soil at high altitude. ***Journal of Plant Physiology* 189: 105-112; 5-year Impact factor: 3.037.**
36. Meghvansi MK, Khan Md H, Gupta R, Chaudhary KK, Siddiqui S, Veer V. 2015. Vermibiotechnology: Relevance, Challenges and Future Prospects for India. *South Asian Journal of Experimental Biology* 5 (6): 222-228
37. Chatterjee S, Sharma S, Prasad RK, Datta S, Dubey D, Meghvansi MK, Vairale MG, Veer V. 2015. Cellulase Enzyme based Biodegradation of Cellulosic Materials: An Overview. *South Asian Journal of Experimental Biology* 5 (6): 271-282

NUCLEOTIDE SEQUENCES DEPOSITED TO NCBI

Sl No	Accession Number	Definition
1.	KC351743	<i>Cercospora</i> sp. strain CS2012 18S ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence
2.	KC355807	<i>Cercospora</i> sp. strain CS2012 histone H3 gene, partial cds
3.	KC355808	<i>Cercospora</i> sp. strain CS2012 actin gene, partial cds
4.	KC513745	<i>Cercospora</i> sp. strain CS2012 calmodulin gene, partial cds
5.	KC513746	<i>Cercospora</i> sp. strain CS2012 translation elongation factor-1 alpha gene, partial cds

Impact/Rating of publications	
Total impact factor as per ISI list (Thomson Reuters)	0.800+1.113+1.247+1.232+3.216+1.018+2.943+4.24+3.037 = 18.846
Index Copernicus Value (ICV)	12.34
Rating by National Academy of Agricultural Sciences (NAAS), New Delhi- list 2007	7.8+7.7+2.0+7.9+7.6+8.4+7.5+7.7 = 56.4

Full Length Papers published in Books/Proceedings

1. Mahna SK, Prasad K, VEDI S, **Meghvansi MK**. 2003. Isolations, authentication and efficiency of indigenous Bradyrhizobial strains of Rajasthan. *In* Singh, V. P. (ed.). Biosciences: Advances, Impact and Relevance. Department of Plant Science, M.J.P. Rohilkhand University, Bareilly (U.P.), India. pp 33-37.
2. Mahna SK, Prasad K, **Meghvansi MK**, Harwani D. 2004. Efficiency of Bradyrhizobia in different soybean cultivars in pots filled in with rhizospheric soils of soybean/non legume cultivated land. *In* Hartmann, A., Schmid, M., Wenzel, W. and Hinsinger, Ph. (eds.). Rhizosphere 2004-Perpectives and Challenges-a Tribute to Lorenz Hiltner, Munich, Germany. 286p.
3. Mahna SK, **Meghvansi MK**, Prasad K, Harwani D, Werner D. 2006. Screening of Efficient Bradyrhizobium japonicum strains for the Improvement of Soybean Production. *In* Bhagyanarayana G, Bhadraiah B, Kunwar IK (eds.). Emerging Trends in Mycology, Plant Pathology and Microbial Biotechnology. B. S. Publications, Hyderabad, India. pp. 267-277.
4. **Meghvansi MK**, Chaudhary KK, Prasad K. 2007. Arbuscular Mycorrhizal Symbiosis: An Overview of Research and Extension needs. *In* Tiwari M, Sati SC (eds.). The Mycorrhizae: Diversity, Ecology and Applications. Daya Publishing House, New Delhi, pp. 87-101.
5. **Meghvansi MK**, Singh L, Srivastava RB and Varma A. 2011. Assessing the role of earthworms in biocontrol of soilborne plant fungal diseases. *In* Karaca A (Ed.)

- Biology of Earthworms (Soil Biology Series vol 24), **Springer-Verlag Berlin Heidelberg**. pp.173-189. ISBN: 978-3-642-14635-0
6. Sarkar P, Saxena R, **Meghvansi MK**, Singh R. 2010. Effective Degradation of Organic Waste with emphasis on kitchen waste using Microbial Consortium. Proceedings of 2010 International Conference on Biotechnology and Food Science (ICBFS 2010) Bangalore, India, 9-10 February, 2010, pp. xxx-xxx. ISBN 978-1-84626-xxx-x (Accepted).
 7. **Meghvansi MK**. 2011. Contribution of Earthworm Bioturbation to Soil Suppressiveness. *DRDO Science Spectrum*, DESIDOC, DRDO, New Delhi, pp. 167-172.
 8. Varma A, Sherameti I, Tripathi S, Prasad R, Das A, Sharma M, Bakshi M, Johnson JM, Bhardwaj S, Arora M, Rastogi K, Agrawal A, Kharkwal AC, Talukdar S, Bagde US, Bisaria VS, Upadhyaya CP, Won PS, Chen Y, Ma J, Lou B, Adya A, Zhong L, **Meghvansi MK**, Gosal SK, Srivastava RB, Johri AK, Cruz C, Oelmüller R. 2012. The Symbiotic Fungus *Piriformospora indica*: Review. In Fungal Associations, 2nd Ed, The Mycota IX, B. Hock (Ed.) **Springer Verlag, ISBN 978-3-642-30825-3. pp. 239-254.**
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1. *Solid Waste Management.* July 2009. Defence Research Laboratory, Tezpur
2. *Vermicomposting.* Lecture delivered at 5 Mtn Div, Tenga and at 190 Bde, Tawang 7 & 9 Dec 2011

3. *Ramayan se paryojana prabandhan ka adhigam* (Learning project management from Ramayana). Lecture delivered on 10 Jan 2011 in Rajbhasha Workshop, Defence Research Laboratory, Tezpur
4. *Contribution of Earthworm Bioturbation to soil suppressiveness*. 28 Feb 2011, Oration on National Science Day, Defence Research Laboratory, Tezpur

WORKING KNOWLEDGE OF ADVANCED TECHNIQUES/TOOLS RELATED TO

- Isolation and maintenance of pure culture of agriculturally important microbes.
- PCR, SDS-PAGE, DGGE
- Elemental analysis (CHNS and other soil nutrients)

AREA OF RESEARCH EXPERTISE/INTEREST

- Legume-*Rhizobium* Technology.
- AM fungal ecology and diversity.
- Cytotoxicity of various metals/chemicals in plant model
- Biomass Management through Vermicomposting and microbial degradation
- Detection and bio-management of foliar fungal phytopathogens in NE India.
